

# WISCONSIN DNR FISHERIES INFORMATION SHEET

LAKE: Twin Falls Flowage COUNTY: FLORENCE YEAR: 2013

The Wisconsin Department of Natural Resources surveyed Twin Falls Flowage, Florence County, during the spring of 2013. This survey was designed to take a look at the flowage's "spring spawning" fish community, with an emphasis on muskellunge. Twin Falls Flowage has many different substrate types, depending on where you are in the flowage. This flowage is the largest waterbody in Florence County comprising approximately 928 acres of flowage and approximately 10 river miles. The maximum depth of Twin Falls Flowage is approximately 50 feet.



This survey was meant to assess the muskellunge fishery in Twin Falls Flowage. Ten standard fyke nets were set in the "badwaters" and "upriver" sections of Twin Falls Flowage and fished for two nights (5/1-2/2013). After the first two days we removed four nets from the "upriver" section of the flowage; the remaining 6 nets were fished through 5/6. No muskies were captured during this survey, indicating a very minimal muskellunge population is present in Twin Falls Flowage.

Until this survey it was thought that a "fishable" muskellunge population was maintained in Twin Falls Flowage through natural reproduction within the flowage, or spill-over from Brule River Flowage (immediately upstream) which maintains a muskellunge population through natural reproduction.

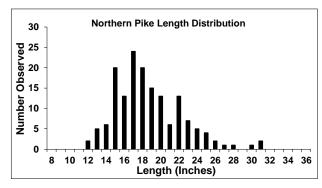
This survey suggests that active stocking is needed to maintain a "fishable" population of muskellunge in Twin Falls Flowage. The WDNR will begin stocking muskellunge into Twin Falls Flowage during the fall of 2014.

### Northern Pike



A total of 28 net-nights were used to assess northern pike abundance. During these net-lifts we captured a total of 458 northern pike (16.4 fish per net-night). This is a very high catch rate for nothern pike, indicating an abundant northern pike population exists in Twin Falls Flowage.

Every northern pike captured on the first day of fyke netting (160 fish) was measured to analyze size structure. The size structure of the northern pike population in Twin Falls Flowage is considered poor with 27.5% and 2.6% of the pike sampled being  $\geq$  21.0 and 28.0 inches respectively. The largest pike measured during our survey was 31.9 inches long.



# Walleye Length Distribution 2 0 7 9 11 13 15 17 19 21 23 25 27 29 Length (Inches)

## Walleye



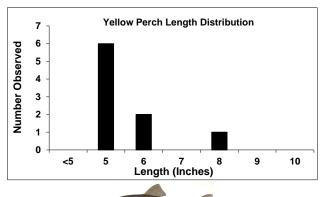
Only three walleye (2 adults) were captured during the spring survey of Twin Falls Flowage (0.11 per net-night). This is a very low catch rate for walleye during a spring fyke net survey. The flowage does not appear to hold a "fishable" walleye population.

# **Black Crappie**



Twin Falls Flowage has an above average abundance of black crappie. Over the first 4-days of spring netting we captured a total of 814 black crappie or approximately 29.1 fish per netlift. This suggests that black crappie are the most abundant "spring spawning" panfish in the flowage.

Every black crappie captured over the first 3-days of netting was measured to assess the size structure of the flowage's crappie population. Size structure of black crappie was very respectible with 41.7% and 11.5% of the fish captured being  $\geq$  8.0 and 10.0 inches in length.

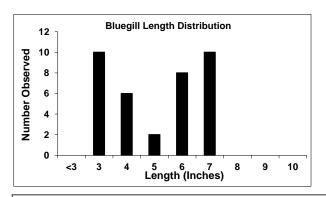


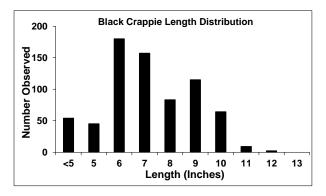
### White Sucker

White sucker were only captured during the first two days of our spring survey, when we had nets set in "upriver" locations. The three "upriver" net locations averaged nearly 5 white sucker per net-night, while net locations in the main flowage rarely captured white sucker. Through the first 4-days of netting 34 white sucker (1.2 per net-night) were captured. All of these fish were measured to analyze size structure.

Size structure of white sucker is very impressive in Twin Falls Flowage. Approximately 81% of the fish captured were  $\geq$  16.0 inches and nearly 44% were  $\geq$  20.0 inches (considered to be the "trophy" size for white sucker).

The overall white sucker numbers appear to be low based on this survey, however, that is because the majority of the effort was geared toward the "badwater" area of the flowage. There does seem to be a healthy white sucker population within the "upriver" segment of the flowage (at least during the spring). The large average size of these fish would make a great prey item for adult muskellunge.



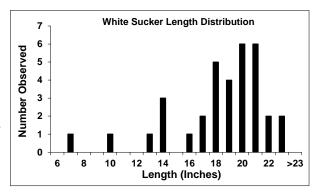


### **Yellow Perch**



During the first 4-days of spring netting we only captured 34 yellow perch, this is a catch rate of approximately 1.21 fish per net-lift. This is a very low catch rate, and suggests that the yellow perch population is relatively small within the flowage.

Yellow perch were only measured during the first day of the survey, since the sample size is very small, little can be said about the size structure of the flowage's yellow perch population.



# Bluegill



Bluegill are not a "spring spawning" species and are normally captured in low numbers during spring surveys. Over the first 4-days of spring netting we captured 279 bluegill (10.0/net-night). This is above average for bluegill during the first week of "ice-off", suggesting that their may be a substantial bluegill population in Twin Falls Flowage.

Like yellow perch, we only measured bluegill captured during the first day of spring netting. This was a small sample and should not be used to analyze size structure.

This report is interim only; data and findings should not be considered final. For answers to questions about fisheries management activites and plans for Twin Falls Flowage contact:

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